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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/728,504 | 12/05/2003 | Pat Y. Mah | MAH-37 | 9099 |

7590 04/21/2006
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Long Beach, CA 90815

| EXAMINER |
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PERRIN, JOSEPH L

| ART UNIT | PAPER NUMBER |
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1746

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,504

Applicant(s)

MAH, PAT Y.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments in view of the amendment filed 27 February 2006, with respect to the drawing objection, abstract objection, rejection under 35 USC §112, second paragraph, rejection under 35 USC §102(b) over GIULIANI, and rejection under 35 USC §102(e) over KUMAZAKI have been fully considered and are persuasive. The aforementioned objections and rejections have been withdrawn.
2. Applicant's arguments with respect to the rejections under 35 USC §102(e) over CHAN and KEMP have been fully considered but they are not persuasive.
3. Regarding CHAN, applicant argues that CHAN is limited to toothbrush applications. This is not persuasive because an ultrasonic toothbrush is a "portable ultrasonic cleaner" as claimed by applicant. Moreover, the intended use of the apparatus is afforded little patentable weight in apparatus claims. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).
"[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (emphasis in original) Even if significant weight were given to the intended use, a toothbrush is fully capable of removing stains in fabric. The prior art is replete with teachings of brushing fabrics for stain removal, such being well known by one having ordinary skill in the art. Applicant further argues the filing date of CHAN (July 9, 2004) is

after the filing date of applicant. This is not persuasive because CHAN claims domestic priority to provisional patent applications filed September 9, 2003 and September 19, 2003 thereby claiming an effective filing date of September 9, 2003. Regarding the newly introduced language "for direct contact with a structure to be cleaned" this is intended use and not afforded significant patentable weight. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Clearly, the apparatus of CHAN is fully capable of direct contact with a structure to be cleaned.

4. Regarding KEMP, applicant repeats the arguments regarding KEMP being directed to a toothbrush. The Examiner reiterates that the intended use of the apparatus is not afforded significant patentable weight, and even if, *arguendo*, one were to give significant patentable weight to such language in an apparatus claim, an ultrasonic toothbrush reads on the claimed "portable ultrasonic cleaner". As readily admitted by applicant, KEMP discloses an electric source for UV light and providing energy for piezoelectric functions. This clearly anticipates applicant's claimed apparatus. As can be further seen in paragraph [0012], such functions may be applied to the brush head as would be readily understood by one having ordinary skill in the art to mean the toothbrush bristle area. Moreover, one having ordinary skill in the art would at once envisage the toothbrush bristles as being the carrier for the piezoelectric energy and part of an ultrasonic radiating structure.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 3-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly introduced limitation of the “ultrasonic radiating structure is linear along said housing” is not adequately supported by the original disclosure as filed and is considered new matter.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by CHAN. CHAN discloses a cleaner having a housing, an ultrasonic radiating structure with piezoelectric transducer driven by driver circuitry, and combining with a light emitting diode ultraviolet source near the ultrasonic radiating structure (see Figures 26-27 and paragraph [0085]). The walls 2020 & 2022 protrude from housing 2014 and can vibrate (i.e. read on being an ultrasonic radiating structure). As shown in Figures 26-27, the

ultrasonic radiating structure has a linear portion along the housing and the light output at least partially follows an extent of the ultrasonic radiating structure. Recitation of CHAN reads on applicant's claimed invention.

9. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated KEMP. Re claim 1, KEMP discloses a cleaner having a housing, an ultrasonic radiating structure with piezoelectric transducer driven by driver circuitry, and combining with a UV light source (see Figure 1 and relative associated text and paragraph [0008]). Re claims 2-4, KEMP discloses using the energy at the phantom head of the toothbrush (i.e. the bristle end). Thus, the position is taken that one having ordinary skill in the art would at once envisage applying the ultraviolet light source and piezoelectric energy to the toothbrush head and bristles, the bristles carrying the piezoelectric energy and protruding from the toothbrush housing. See entire document, for instance, paragraph [0012]. Accordingly, recitation of KEMP reads on applicant's claimed invention.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHAN. Recitation of CHAN is repeated here from above. In paragraphs [0055] & [0056], CHAN discloses one or more light output sources and various arrangements including the ultrasonic radiating structure but does not expressly disclose a pair of light output sources located on opposite sides of the ultrasonic radiating structure. It would have been obvious to one having ordinary skill in the art at the time the invention was made to take the explicitly taught light output sources and explicitly taught ultrasonic radiating source and rearrange the components such that the light output sources were located on opposite sides of the ultrasonic radiating structure (particularly given the various locations and arrangements of the components), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Absent a showing of objective evidence of secondary considerations, i.e. unexpected results, the position is taken that the arrangement of such parts would be obvious.

13. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over KEMP. Recitation of KEMP is repeated here from above. Although KEMP does not expressly disclose a pair of ultraviolet light output sources, the position is taken that it would have been obvious to supply the cleaning apparatus of KEMP with more than one ultraviolet light source since it has been held that mere duplication of the essential

working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8; *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding the arrangement of light sources and ultrasonic structures, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the explicitly taught light output sources and explicitly taught ultrasonic radiating source and rearrange the components such that the light output sources were located on opposite sides of the ultrasonic radiating structure (particularly given the various locations and arrangements of the components), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Absent a showing of objective evidence of secondary considerations, i.e. unexpected results, the position is taken that the duplication of parts and arrangement of such parts would be obvious.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

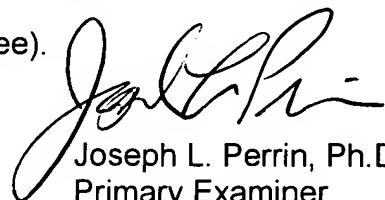
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1746

jlp